

AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the original application and Amendment A:

LISTING OF CLAIMS:

Claims 1-18 (canceled)

Claim 1 (new): A method for an inertial oscillator control system involving a first embodiment for lifting a heavy gravity payload comprising:

- a) utilizing the compound action of coriolis-centrifugal forces in a three body variable radius oscillator,
- b) torque supply source consisting of sliding gear arrangement,
- c) a moveable platform that carries the force generating bodies rotating about respective axles,
- d) coupling and release of platform with rigid load rod connected to a frame for angular durations less than 90 degrees of planet rotation,
- e) while maintaining constant angular velocity of the rotor bodies by a regulation system,
- f) and maintaining an elevational position of the platform in the gravity field using a spring-crank mechanism,
- g) and vectoring the platform-frame off from the vertical to obtain horizontal motion of the payload,
- h) and a motor drive source of high torque capacity.

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Claim 2 (new): A near vertical lift system for a gravity payload in a second embodiment comprising:

- a) a rotary torque source using an oldham coupler between motor and oscillator input axle,
- b) driving a two body oscillator consisting of platform with a single rotor,
- c) in a coaxial arrangement of multiple oscillators with each rotor clocked 180 degrees apart from the next oscillator rotor,
- d) that co-rotate in one direction to provide a net gyroscopic moment to stabilize the vehicle once in the air,
- e) a heavy duty clutching system that couples to the load rod held in tension connection with the frame,
- f) a spring-crank mechanism to maintain platform elevation relative to frame and load,
- g) a speed regulation design system using a mechanical governor,
- h) and a motor source to provide input power to the lifting system in this second simpler embodiment.

Claim 3 (new): A system as in claim 1 where the mechanical clutch is a toggle clamp with follower and actuation cam on adjacent first gear to engage a grooved load rod or member between a backup plate on platform with toggle release from a pin on a second gear thereby freeing the oscillator at end of said coupling.

Claim 4 (new) A system as in Claim 1 with a mechanical clutch using a cam buckle acting on a nylon/kevlar webbing in tension with the frame.

Claim 5 (new): A system as in Claim 1 where the rotor mass is a satellite rotor mass attached to a planet gear via arm which revolves around a fixed sun gear via an axle connected to driving input axle.

Claim 6 (new): A system as in claim 1 where the distances between the respective rotating masses are equal.

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- Claim 7 (new) A system as in claim 2 where the satellite mass is zero and just the planet rotor revolves around the sun gear axle.
- Claim 8 (new) A system as in claim 2 where the platform mass is equal to twice the mass sum of the planet and satellite rotors.
- Claim 9 (new) A system as in claim 1 and 2 where the motor is an AC induction motor.
- Claim 10 (new) A system as in claim 1 and 2 where the motor is a DC electric motor.
- Claim 11 (new) A system as in claim 1 and 2 is an internal combustion engine.
- Claim 12 (new) A system as in claim 1 where the drive input is a splined shaft with slidable worm acting on worm gears on platform to rotate the masses.
- Claim 13 (new) A system as in claim 1 where at least two oscillator units are paired in a fram to prvide zero transverse forces and multiple pulses of thrust per rotation.
- Claim 14 (new) A system in claim 1 and 2 where the frame is mounted above the payload in gimbal or pivotable manner to permit vectoring of thrust for horizonal and azimuthal motion of load.
- Claim 15 (new) A system as in claim 2 where the drive is a pair of chains and sprockets clocked in synchronous operation with the motor and crank spring elevation device as well as driving the rotors.


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